AMENDMENTS TO THE CLAIMS:

Please cancel claims 1-19 without prejudice. Please add new claims 20-29 as follows.

--20. (New) A process for obtaining tetrafluoroethylene thermoprocessable copolymer microspheres, said process comprising the steps of:

providing equipment formed by a coagulation apparatus, said equipment including a jacket for maintaining a temperature in the coagulation apparatus at a desired value, an outlet for the coagulated product, a coagulant inlet, a latex inlet, a filter, and a liquid outlet;

feeding at least one of latex and coagulant into respective inlets,

wherein the microspheres have a substantially spherical shape for at least 95% by weight, the average size of the microspheres being in the range of 25 μm-2 mm, the bulk density being in the range 0.5-1.1 g/cm^3, preferably 0.55-1.0 g/cm^3.

21. (New) A process according to claim 20, wherein in the initial conditions the coagulation apparatus is free from air, filled with water and a coagulant selected from acids, bases and salts.

22. (New) A process according to claim 20, wherein when the steady state is reached, the polymerization latex is continuously fed to the semi-continuous coagulation apparatus; separately a coagulant is fed continuously, while the water is taken in a continuous way from the upper part of the coagulation apparatus by a filter.

23. (New) A process according to claim 20, wherein the temperature is in the range of 5° - 90°C, preferably 15° - 70°C; the mixing rate ranges between 5 and 25 rps, preferably 10 and 20 rps.

24. (New) A process according to claim 20, wherein the latex and the coagulant are fed at least in two steps, preferably in three steps.

25. (New) A process according to claim 24, wherein:

in the first step the polymer concentration of the latex ranges from 25 g/litre to 300 g/litre, preferably 50-200 g/litre; the latex feeding flow-rate is in the range 5 1/hour - 45 1/hour; the time of this step is lower than 10 minutes;

the second step is optional and consists in ending the nucleation, preferably by feeding a polymer flow-rate corresponding to 10% of that fed in the first step;

in the third step the polymer concentration of the fed latex is between 25 g/litre and 300 g/litre, preferably between 50 and 200 g/litre; the latex feeding flow rate is in the range 5 1/hour - 30 1/hour; the time of this step is higher than 15 minutes.

26. (New) A process according to claim 20, wherein after a total residence time comprised between about 25 minutes and 10 hours, the fluoropolymer microspheres are discharged in a discontinuous way from the bottom of the coagulation apparatus; subsequently the microspheres are subjected to a drying step at a temperature in the range of 170° - 280°C.

27. (New) Use of the microspheres according to claim 20 in powder coating and flame spraying applications.

28. (New) Use of the microspheres according to claim 20 in rotomoulding and rotolining applications.

29. (New) Use of the microspheres according to claim 20 as inert support in chromatographic separation columns in gaseous or liquid phase. --